

NNSA Policy Letter: NAP-3 Date: July 18, 2002

TITLE: NNSA Environment, Safety and Health Management Process Guidance

I. <u>OBJECTIVE</u>: To "grandfather" this existing Guidance into the NNSA Policy Letter System.

This guidance provides instruction for the preparation of NNSA Environment, Safety and Health (ES&H) Five-Year Site Plans. It is intended to ensure that information on the ES&H component of NNSA's proposed budgets and operating work to be performed at each site is available to NNSA line managers, both in the Field and at Headquarters, in order for them to be accountable for ES&H performance.

- II. <u>APPLICABILITY</u>: The provisions of Policy Letters apply to all of the Administration's organizations and elements and to non-NNSA elements funding activities at sites where the Administration is the landlord, with the exception of Naval Reactors.
- III. <u>REQUIREMENTS</u>: See attached Guidance.
- IV. RESPONSIBILITIES: See attached Guidance.
- V. <u>POINT OF CONTACT FOR ADMINISTRATION POLICY LETTER</u>: Director, Office of Environment, Safety and Health Operations Support (NA-53), 202-586-8395.

Attachment:

"Guidance Document for National Nuclear Security Administration Environment, Safety & Health Management Process"

memorandum

DATE:

MAR 2 7 2002

REPLY TO ATTN OF:

NNSA: Associate Administrator for Facilities and Operations (NA-50)

SUBJECT:

FISCAL YEAR (FY) 2004 ENVIRONMENT, SAFETY AND HEALTH (ES&H) MANAGEMENT PROCESS GUIDANCE DOCUMENT

TO:

Distribution

The attached guidance implements the new National Nuclear Security Administration (NNSA) ES&H Management Process. It is intended to ensure that information on the ES&H work to be performed at each site and associated budgets, is available to NNSA line managers, both in the Field and at Headquarters. This information is required in order for NNSA line and support organizations to be accountable, jointly sharing risk for ES&H performance. The new ES&H Management Process will enable line managers to integrate ES&H activities with other program activities and incorporate those decisions at the appropriate steps of the NNSA Planning, Programming, Budgeting and Evaluation process.

This guidance is the culmination of six months effort of both Headquarters and Field personnel to streamline the previous ES&H management process requirements and to make the process more useful to line managers. Further, the ES&H Crosscut section of the Department's FY 2004 budget guidance indicates that the NNSA ES&H Five-Year Site Plans (FYSP) satisfy the Department's requirements for the ES&H data submission.

Since this is the initial submission for the ES&H FYSP's, it is requested that along with the site submissions that you include any recommendations to improve the ES&H Management Planning process. The ES&H resource estimates contained in the ES&H FYSP's are subject to change, and if necessary, should be updated to assure consistency with the President's budget and enacted appropriations.

As part of the current effort to identify and reduce the administrative burdens on the Plants and Laboratories, this guidance will be reevaluated in one year to include lessons learned and additional means to relieve the administrative workload throughout NNSA.

Submit three copies of the sites' input by May 1, 2002 to NA-53, attention Mr. Neglia. Mr. Neglia will be responsible to ensure that copies are distributed to the appropriate offices.

Associate Administrator for Facilities and Operations

Attachment

Distribution:

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Guidance Document for National Nuclear Security Administration Environment, Safety & Health Management Process

March 2002

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1.0 Purpose

This guidance will be institutionalized by a new National Nuclear Security Administration (NNSA) Environment, Safety and Health (ES&H) Management Process policy when it is issued. It is intended to ensure information on the ES&H component of NNSA's proposed budgets and operating work to be performed at each site is available to NNSA line managers, both in the Field and at Headquarters, in order for them to be accountable for ES&H performance.

As a result of requirements in the Department of Energy Acquisition Regulations (DEAR) Clause 48 CFR 970.5223-1, *Integration of Environment, Safety and Health into Work Planning and Execution*, NNSA contractors have developed and implemented Integrated Safety Management (ISM) systems. ES&H management and resource requirements or issues are elevated for fiscal or management attention to NNSA federal line management and will be addressed during the appropriate phases of the NNSA's Planning, Programming, Budgeting and Evaluation (PPBE) process. This integration of ES&H within both ISM and PPBE will serve to strengthen the contractor/federal interface and NNSA federal managers' ability to satisfy their line management responsibilities for ES&H oversight.

This guidance provides directions for the preparation of NNSA ES&H Five-Year Site Plans. These ES&H Five-Year Site Plans, as they extend through all phases of the PPBE process, shall be a key federal "mechanism" of the NNSA ISM system, and are intended to interface with, but not replace, existing contractor systems developed in support of their own ISM implementation.

2.0 Integrating Environment, Safety and Health Decisions

NNSA's Line Managers will integrate ES&H activities with other programmatic activities, and incorporate ES&H decisions at the appropriate steps during the PPBE process. The PPBE process links long-range planning (what we need to do) with programming (how we accomplish it), with budget formulation and justification (obtaining resources and applying fiscal constraints), budget execution (applying resources to accomplish the mission), and evaluation (verifying the mission has been accomplished and making necessary improvements). Line managers must consider ES&H throughout all phases of the PPBE process. Details for the process will be refined as NNSA and DOE become more specific in promulgating the PPBE process.

A diagram illustrating the key steps of the NNSA's PPBE process and how ES&H management and resource decisions align with that process is presented in Figure 1. These elements also parallel the processes used in the five core functions of ISM.

Figure 1. How ES&H aligns with the PPBE Elements.

PLANNING PROGRAMMING • Missions are translated to work per Tasks are prioritized and resourced, e.g., the NNSA Strategic Plan with for Campaigns, DSW, and RTBF to ES&H activities support the Defense Programs Stockpile · Expectations are set and Stewardship Plan communicated • Five-year, one-year, ES&H requirements are identified · Tasks are identified • Hazards are identified and controls are Feedback is utilized from Corporate ES&H metrics ISM graded approach is used to balance • Compliance is proactive vs. Uses ISMS to enhance the visibility reactively applied of ES&H in the performance of work Identifies more timely, accurate, and forward looking ES&H information for line manager decision-making • Provides a tool to link the ISM process with PPBE Satisfies multiple reporting requirements Facilitates line ES&H oversight with the potential to reduce the number of assessments **BUDGETING** -**EVALUATION FORMULATION** · Performance based · Program Plans, as supported by metrics and oversight ES&H Five-Year Site Plans, are used systems guide ES&H as the basis for budget formulation oversight Resources are allocated based on Opportunities for **BUDGETING** prioritized tasks refining the scope of ES&H activities are prioritized using **EXECUTION** work are identified the ISM verified budget process • ES&H compliance liabilities • Line oversight is Funded and unfunded ES&H issues and regulatory commitments conducted are identified are established Periodic site program • Total ES&H budget is identified · ES&H controls are reviews include ES&H implemented and work is performance authorized Work is performed using the DOE approved ISM system · Change control process is established for ES&H commitments at the site level per the approved ISM system • Periodic site program reviews

discuss ES&H commitment

progress

3.0 Planning Phase

During the planning phase, NNSA will develop a strategic ES&H Five-Year Program Plan that identifies ES&H short- and long-term programmatic needs and objectives. The program plan will identify top-level ES&H goals, objectives, and strategies for incorporation into site and program activities. This plan will also provide an NNSA framework for the development of corporate-level, quantifiable, ES&H performance metrics thereby satisfying the requirements of the Government Performance and Results Act of 1993.

3.1 Key NNSA ES&H Elements

The strategies identified in the NNSA Strategic Plan and the Associate Administrator for Facilities and Operations (AAFO) Program Implementation Plan (PIP) are the basis for formulating the annual ES&H Five-Year Program Plan that provides additional high-level objectives for executing ES&H program work. Five ES&H elements that have been endorsed by NNSA as areas of emphasis are as follows:

- Implement and maintain an effective ISM program
- Ensure appropriate levels of public and employee health and safety
- Ensure appropriate levels of environmental protection/pollution prevention
- Ensure that ES&H operations support accomplishment of programmatic objectives and are as efficient and cost effective as practicable
- Ensure that appropriate NNSA and Contractor management attention, is focused on ES&H performance

Current Department of Energy (DOE) ISM performance metrics will be utilized by NNSA Headquarters to monitor contractor performance. NNSA may provide additional ES&H performance metrics related to the above five ES&H elements as appropriate.

3.2 NNSA ES&H Prioritization Guidance

Annually, AAFO and Program Offices will provide guidance on the prioritization of ES&H activities through PIPs. Until the first PIP is issued, refer to existing program guidance in establishing ES&H priorities.

4.0 Programming Phase

During the programming phase, NNSA will translate information and guidance from the planning phase into a fiscally defined NNSA ES&H Five-Year Program Plan. The ES&H Five-Year Site Plans will integrate programmatic mission needs with ES&H requirements. This is similar to the integration of programmatic mission needs with F&I using the Ten Year Comprehensive Site Plan (TYCSP) process and the integration of programmatic mission needs with S&S using Site S&S Plans (SSSP).

4.1 Five-Year ES&H Site Plans

NNSA contractors have developed and implemented ISM systems that include key elements of site ES&H management systems. Development of an ES&H Five-Year Site Plan will serve to strengthen contractor/NNSA communication and NNSA federal managers' ability to satisfy their line management responsibilities for ES&H oversight.

ES&H Five-Year Site Plans are an important mechanism for facilitation of the NNSA ISM system and are intended to interface with, but not replace, existing contractor systems developed in support of their own ISM implementation.

4.1.1 Scope

The ES&H Site Plan provides a program plan for each site, on a five year planning horizon, of how ES&H resources support the successful mission work at the site and for NNSA. The ES&H Five-Year Site Plans will outline the strategies and performance measures for addressing high-level ES&H issues and potential impacts. Identification of potential ES&H issues in ES&H Five-Year Site Plans will assist NNSA in doing forward looking planning to ensure science and production facilities are ready and available to perform core missions. For major ES&H issues identified, alternatives, trade-offs and recommendations will be made and coordinated with appropriate federal officials for concurrence.

ES&H costs associated with program activities should be reported, as practicable. It is NNSA's expectation that direct mission support for ES&H activities be direct funded through the sponsoring program (e.g., Campaigns, DSW, etc.) and that facility ES&H costs be direct funded through RTBF for mission critical facilities, as appropriate. Non-RTBF facility ES&H costs should be incorporated within the ES&H Five-Year Site Plans as either direct or indirect accounts.

It is recognized that ISM initiatives have resulted in improved integration of ES&H into mission work planning and execution. As this desired integration continues, it will become more difficult to separately identify specific ES&H costs and resource requirements, i.e. ES&H becomes more integrated with the work. As a result, the ES&H Five-Year Site Plan will become more focused on the planning and deployment of discrete ES&H programmatic resources and less focused on those resources integrated with mission work. The ES&H Five-Year Site Plan describes the NNSA ES&H programs and infrastructure elements needed to provide support in the traditional ES&H functional areas.

For the purpose of effective ES&H resource management and planning, both federal managers and contractors should identify resource allocations, strategic ES&H issues, and potential impacts. The ES&H Five-Year Site Plan provides a format and mechanism for contractors and area/field offices to gather and report that information to NNSA.

The following ES&H functional areas have been identified to help categorize ES&H programs and to assist in the preparation of the ES&H Five-Year Site Plan for a site's overall ES&H

program. Eleven Safety & Health functional areas and seven Environmental functional areas have been defined for ES&H programming and budgeting. Functional area definitions are provided in the DOE-wide ES&H guidance included with the Field Budget Call and/or in Appendix D.

Safety and Health	Environmental
Emergency Preparedness (EP)	Protection of Air Quality (CA)
Fire Protection (FP)	Protection of Water Quality (CW)
Industrial Hygiene (IH)	Control of Toxic Substances (CS)
Industrial Safety (IS)	Environmental Restoration (ER)
Occupational Medical Services (MS)	Pollution Prevention/Waste Minimization (PP)
Safety Authorization Basis (AB)	Waste Management (WM)
Nuclear Criticality Safety (NC)	Management Oversight & Reporting (MR)
Nuclear Safety (NS)	
Radiation Program (RP)	
Transportation Safety (TS)	
Management Oversight & Reporting (MO)	

ES&H Five-Year Site Plans provide the information necessary to determine the ES&H Compliance Liability estimate for the site (reference Section 6.2.1 and Appendix A).

4.1.2 Site Plan Outline and General Contents

The outline and format in Appendix A of this document meets NNSA's expectation for the ES&H Five-Year Site Plan. The basic contents of the ES&H Five-Year ES&H Site Plan will include a resource summary (annual funding requirements and ES&H compliance liability estimate information), ES&H compliance activities (both funded and unfunded) in priority order by fiscal year, open commitments to regulators (both funded and unfunded) in priority order by fiscal year, unfunded core program maintenance/investment/improvement information in priority order, and a site section which includes ES&H performance metrics. Other formats are acceptable with the concurrence of the NNSA Field Element Manager. The NNSA Field Element and their contractor(s) should establish the level of detail for the communication format. The scope and contents of each section is described in more detail in Appendix A.

4.1.3 Reporting and Deliverables

ES&H Five-Year Site Plans shall be prepared annually to support out-year programming, the budget request for the next budget year, and to provide ES&H execution information. ES&H Five-Year Site Plans must be closely linked with the information in the sites' FY 2004 Budget Call submission. Any funding profiles shown in ES&H Five-Year Site Plans must track and be consistent with the same elements shown under the appropriation (e.g., DSW, Campaigns, RTBF, etc.) section of the FY 2004 Budget Call. The following is the schedule for delivery of the ES&H Five-Year Site Plans:

• A draft ES&H Five-Year Site Plan is due May 1, 2002 to NNSA Headquarters to initiate program and budget discussions. This deliverable schedule is intended to ensure draft ES&H Five-Year Site Plans are consistent with NNSA's FY 2004 Budget Request.

[Note: The draft plan should provide the budgeting formulation, budgeting execution, and evaluation information described in Sections 5.1, 6.2.2, and 7.1.]

• Final ES&H Five-Year Site Plans are due to NNSA Headquarters 30 days after the end of FY 2002 or after the FY 2003 funds have been appropriated, whichever is later. [Note: The final plan should provide the revised budgeting formulation, budgeting execution, and evaluation information described in Sections 5.1, 6.2.2, and 7.1.]

The scope of the ES&H Five-Year Site Plans is also governed by the following:

- NNSA Landlord Sites. Sites for which NNSA is landlord should address all site ES&H requirements, regardless of the funding Program Secretarial Officer (PSO) or outside funding source.
- Other Lead Program Secretarial Officer (LPSO) Landlord Sites. NNSA elements located at sites for which NNSA is not landlord or where another LPSO's contractor and budget are entirely independent of the NNSA contractor, e.g., Savannah River Site or Y-12, only need to address NNSA specific ES&H requirements.

Each site contractor shall negotiate the development and review schedule of the site plan with the local NNSA Field Element (i.e., Area/Operations/Field Office) Manager. ES&H Five-Year Site Plans shall be signed by contractor executive management signifying that the plan represents management's commitment to conduct the defined ES&H programs and activities. If the ES&H Five-Year Site Plan submittal includes compliance activities, the contractor executive management signature will also attest to the accuracy of the cost and scope of the ES&H compliance activities.

The manager/contracting officer of the local NNSA Field Element shall review and comment on the draft and formally approve the contractor's final ES&H Five-Year Site Plan, signifying acceptance of the risk associated with the ES&H Five-Year Site Plan on behalf of the NNSA. Significant issues involving substantial risks that cannot be resolved at the field level should be formally raised to NNSA Headquarters' attention. Additionally, any significant issues relating to the lack of funding and/or policy guidance should also be raised to NNSA Headquarters' attention.

5.0 Budgeting Formulation and Justification Phase

For FY 2004 budgeting, program requirements from the planning and programming phase (i.e., ES&H Five-Year Site Plan) are defined and converted into requests for resources.

The ES&H Five-Year Site Plan will be the basis for NNSA's ES&H budget year resource requirements. Contractors should ensure the Budget Year ES&H resource summary information in the ES&H Five-Year Site Plan is accurate and that both the funded and unfunded ES&H compliance activities and regulatory commitments are described.

ES&H requirements considered in prioritization should include laws, regulations, executive orders, and commitments to regulators and the Defense Nuclear Facility Safety Board (DNFSB). Some specific information requirements that should be addressed in the FY 2004 Budget include, but are not limited to:

- Executive Order 13148, Greening the Government through Leadership in Environmental Management, which requires the implementation of environmental management systems and environmental compliance audits at all agency sites. The order also imposes specific pollution prevention goals and requires implementation of return-on-investment programs. Sites should include activities that meet the requirements of this executive order, as well as the other Greening the Government Orders as applicable. DOE N 450.4, Assigning Responsibilities for Executive Order 13148, Greening the Government Through Leadership in Environmental Management, dated 02-05-01, provides specific implementing instructions.
- Sites should incorporate activities into their ES&H Five-Year Site Plans that meet the Departmental pollution prevention goals established by former Secretary of Energy Richardson in his November 12, 1999 memorandum for the Heads of all Departmental Elements on Pollution Prevent ion and Energy Efficiency Leadership Goals for Fiscal Year 2000 and Beyond. In this memorandum he set specific pollution prevention goals to be achieved by 2005 and 2010. These pollution prevention/energy goals are DOE-wide goals, not site-specific. On December 6, 2000, the former Deputy Secretary of Energy issued a memorandum on Commitment to Implement the Secretary's Pollution Prevention and Energy Efficiency (P2/E2) Leadership Goals that provides specific site goals that contribute to the P2/E2 goals for FY 2005.
- Defense nuclear sites that are subject to DNFSB Recommendation 2000-2, Configuration Management Vital Safety Systems, should identify specific ES&H activities needed to correct deficiencies in their vital safety systems discovered in Phase I and II operability assessments and other such assessments. The deliverable under Commitment 8 to the Departmental Implementation Plan for DNFSB 2000-2 is to provide a summary of resources allocated within the FY 2003 and FY 2004 budget request to Congress. To meet this deliverable, the specific ES&H activities identified as necessary to address this commitment should be included in ES&H Five-Year Site Plans as compliance activities. Of particular importance are major activities requiring capital funding (General Plant Project (GPP) or Line Item Project (LIP)).

5.1 Reporting and Deliverables

The schedule for delivery of the ES&H Five-Year Site Plans is noted in Section 4.1.3. Specific information that should be reported for the Budget Year in the plan is as follows:

• At the draft stage, the FY 2004 ES&H budget information in the resource tables should reflect the site's best estimate of the total ES&H funding (core and compliance) for FY

2004. The ES&H compliance activities and open commitments to regulators proposed for the Budget Year (FY 2004) should be described in accordance with the ES&H Five-Year Site Plan instructions.

• NNSA Headquarters will communicate any changes to budget targets that may occur during the budget deliberations in the PPBE programming and budget formulation phases to the NNSA Field Element Manager. Accordingly, the final ES&H Five-Year Site Plan deliverable should be updated to reflect the agreed upon budget targets for FY 2004 ES&H budget information (both core and compliance) in the resource tables. In addition, the ES&H compliance activities and open commitments to regulators information should be updated to reflect the actual activities that will be included in the Office of Management and Budget (OMB) Stage Budget request for the Budget Year (FY 2004).

5.2 Coordination of Budget Changes

Budget targets are likely to change as the budget goes through the different stages from field submission and Headquarters preparation of the NNSA budget to the OMB budget to the President's budget culminating in the Congressional appropriation.

Changes in the Budget Year target level will be communicated from NNSA Headquarters to NNSA Field Element Managers. If changes in the budget target have a significant impact on planned ES&H activities, the NNSA contractors should communicate these impacts to the NNSA Field Element Manager who will inform NNSA Headquarters as appropriate.

6.0 Budgeting Execution Phase

The execution phase is designed to improve the budget and schedules control process, resource accountability, implementation of ES&H aspects of the integrated NNSA change control process, timely distribution of program requirements and work authorizations, and clearer federal and contractor accountability for program requirements. During execution, the resources that have been allocated will be applied to meet the established ES&H requirements.

This NNSA guidance is the DOE "program and budget and execution guidance" referenced in DEAR Clause 48 CFR, 970.5223-1 that requires annual reporting of major ES&H performance objectives, measures, and commitments made for work execution during the fiscal year.

The ES&H Five-Year Site Plan will also be the basis for NNSA's ES&H execution resource requirements. Specific information requirements are described in Section 6.2.2.

6.1 Transition from Budgeting Formulation to Budgeting Execution Phase

Implementation of the DEAR Clause 48 CFR, 970.5223-1 requires, in part, that sites meet ES&H budget needs. The annual ES&H budget information submission identifies significant hazards associated with planned work and describes the planned ES&H resource requirements necessary to implement safety controls and satisfy major ES&H requirements and commitments for the

Budget Year. These planned activities and resource requirements may change somewhat as they proceed through the 18 month budget appropriation cycle; however, they eventually become actual ES&H work commitments to which NNSA will hold contractors accountable.

In transitioning from out-year programming and budgeting to actual work, accountability is achieved by conducting the actions necessary to meet the five core safety management functions described in DOE P 450.4 and DOE G 450.4-1. Contractors should annually update their safety performance objectives and commitments in response to NNSA program and budget execution guidance and direction. ES&H resources needed to conduct work safely in the execution year should be identified and allocated to meet ES&H objectives and performance commitments. It is recognized that while the scope and level of detail may differ, both NNSA Field Element Managers and NNSA Headquarters require information on these ES&H performance measures, objectives, and commitments.

6.2 ES&H Work Authorization

It is NNSA's expectation that the NNSA Field Element Manager/Contracting Officer be aware of the actual ES&H related work, including institutional ES&H funded by indirect funds, being conducted at their respective sites. The process by which NNSA will authorize ES&H work identified in ES&H Five-Year Site Plans will be established and managed locally between the NNSA Field Element Manager/Contracting Officer and the contractor consistent with the site's approved ISM system. ES&H activities should become a part of the site's work authorization systems (e.g., Work Planning Documents, Work Authorization Documents, Annual Operating Plan, etc.) and monitored like any other programmatic work.

It is NNSA's expectation that progress in performing ES&H work shall be communicated from the contractor to NNSA. In particular, progress in meeting ES&H work commitments should be discussed during routinely scheduled (e.g., quarterly) program reviews (e.g., RTBF, Campaigns, DSW, etc.).

6.2.1 ES&H Commitments

ES&H commitments should be established annually between NNSA Field Element Managers/ Contracting Officers and NNSA sites in accordance with the DEAR Clause 48 CFR, 970.5223-1, and the site's approved ISM System Description (ISMSD). For the execution year(s), the ES&H Five-Year Site Plans should provide information on those ES&H compliance activities and commitments to regulators, with any applicable metrics and milestones that were agreed upon as ES&H commitments. Site ISM/business systems should provide the ability to track actual allocation of ES&H resources against planned commitments and should enable NNSA to monitor and hold contractors accountable for ES&H commitments, as it does programmatic commitments.

The responsibility for monitoring contractor ES&H performance in meeting commitments rests with the NNSA Field Element Manager/Contracting Officers for their respective site(s). As part

of the ES&H performance evaluation process, ES&H commitments will be tracked at the NNSA Field Element level and monitored via specific milestones and/or performance measures.

6.2.2 Reporting and Deliverables

The schedule for delivery of the ES&H Five-Year Site Plans is noted in Section 4.1.3. Specific information that should be reported for Budgeting Execution in the plan is as follows:

- At the draft stage, the ES&H budgeting execution information in the resource tables should reflect the site's current plan for total ES&H funding (core and compliance) for FY 2002, and the site's best estimate of the total ES&H funding for FY 2003. The plan should reflect the actual ES&H Compliance Activities and Open Commitments to regulators being conducted in FY 2002 and those currently planned for FY 2003.
- In the final ES&H Five-Year Site Plan deliverable, the ES&H bud geting execution information in the resource tables should reflect the site's best estimate for actual total ES&H funding (core and compliance) expended in FY 2002 and the site's approved plan for total ES&H funding in FY 2003. The plan should be updated to reflect status of the actual ES&H Compliance Activities and Open Commitments to regulators that were conducted in FY 2002 and those included in the approved work plans for FY 2003.

6.2.3 Change Control

The contractor will manage changes to ES&H work priorities and commitments in accordance with the site's approved ISMSD. The NNSA Field Element Manager/ Contracting Officer should be advised of significant changes to ES&H work per the ISMSD. However, major changes to baselines that breach established cost or schedule agreements will normally be approved by the NNSA Field Element Manager/Contracting Officer and will be reported to NNSA Headquarters. Using a tailored approach, Headquarters and the Field will agree to a set of minimum thresholds prior to the start of the current year.

Each NNSA Area/Operations/Field Office is expected to have/implement a change control mechanism for ES&H work.

7.0 Evaluation Phase

The objective of the evaluation phase is to provide management with timely and accurate information that will be used to evaluate ES&H progress and performance and to identify significant cost and schedule variances from NNSA commitments.

ES&H Performance Measurement

ES&H metrics should be established annually between NNSA Field Element Managers/Contracting Officers and NNSA sites in accordance with the DEAR Clause 48 CFR, 970.5223-1, and the site's approved ISMSD. It is NNSA's expectation that in establishing these annual metrics, NNSA Field Element Managers/Contracting Officers will utilize the Conditional

Payment of Fee, Profit, and Incentives Clause (48 CFR, 970.5204-86) as appropriate to enhance contractor ES&H performance.

The annual ES&H performance metrics agreed to by the contractor and NNSA Field Element per the ISMSD should be listed in the Site Section of the ES&H Five-Year Site Plan. The current DOE ISM Performance metrics will be utilized by NNSA Headquarters to monitor contractor performance. NNSA may provide additional ES&H performance metrics related to the five ES&H elements described in Section 3.1, as appropriate. These corporate metrics may differ from those utilized to monitor the contractor's contractual performance for fee determinations as part of ISM.

8.0 Roles and Responsibilities

Site Contractor

NNSA contractors should conduct ES&H planning, programming, budgeting, execution and evaluation in accordance with negotiated contracts and the site-approved ISMSD. As a means of communicating ES&H planning, resource requirements and execution to NNSA line management, the contractor shall prepare an ES&H Five-Year Site Plan as specified by this guidance. It is recognized that utilization of this information out of existing contractor business systems that have been validated to meet the requirements for implementation of ISM.

Contractor executive management (e.g., laboratory director, plant manager, etc.) shall review the accuracy and validity of the ES&H resource requirements identified in the site's ES&H submissions required by this guidance and approve the draft and final submissions. The ES&H Five-Year Site Plan should represent the best estimate of a site's current overall ES&H posture and path forward.

NNSA Field Element

Each NNSA Field Element is responsible for collecting the ES&H Five-Year Site Plans from each of its operating organizations and forwarding to NNSA Headquarters. In addition, the NNSA Field Element Manager/Contracting Officer is responsible for monitoring and approving ES&H work during the execution phase. Using a tailored approach, Headquarters and the Field will agree to a set of minimum change control thresholds prior to the start of the current year.

Each NNSA Field Element should determine its own ES&H resource requirements necessary to conduct its ES&H oversight functions under DOE P 450.5. These requirements may include both federal employees and support services costs used to provide ES&H support. The Federal Full-Time Equivalents (FTEs) for ES&H should be determined. The format for this reporting requirement is not prescribed, however, costs should be related to the individual ES&H functional areas described in the DOE-wide ES&H guidance included with the Field Budget Call and Appendix D where practicable. This should include FTEs for facility representatives, environmental engineers, and other ES&H related subject matter experts (SMEs).

The NNSA Field Element should review ES&H Five-Year Site Plans for quality and completeness of the ES&H information and to ensure the information supports NNSA's strategic goals. It is expected the NNSA Field Element will review the ES&H compliance activities and commitments to regulators. The NNSA Field Element should review the ES&H priorities established by the contractors in their ES&H Five-Year Site Plan and the funding decisions that result from those priorities. They should assure that all significant ES&H risks are adequately addressed or that adequate compensatory actions are in place until more permanent solutions can be funded. The NNSA Field Element is responsible for assuring that the ES&H information is consistent with Departmental and NNSA guidance.

The financial management and budget offices in the NNSA Field Element should ensure that the funding status and cost information is consistent with the financial information provided in the primary budget materials (i.e., field work proposals, project data sheets, etc.) that comprise the field submission. In particular, the FY 2002 funded ES&H activity costs should be reviewed to ensure consistency with ES&H commitments and the current year appropriations/ expenditures. The FY 2003 direct funded activity costs should be consistent with the information in the Congressional Request Budget (or the most up-to-date information available). The FY 2004 direct funded activities and costs should be consistent with the operating organization's budget submission.

The responsible NNSA Field Element Manager shall approve the ES&H Five-Year Site Plan(s) submitted by the contractor(s). This signature signifies acceptance by the NNSA of the risks assumed by the contractor(s) on behalf of the NNSA, agreement with the relative funding priorities, acceptance of the related ES&H deliverables and performance measures, and satisfactory completion of the financial management review as described above.

The ES&H Five-Year Site Plans and NNSA Field Element resource requirements should be sent to NNSA Headquarters and to the DOE Chief Financial Officer (CFO). If another PSO is direct funding programs that require direct ES&H support funding, provide that PSO with a copy of the relevant ES&H Five-Year Site Plan information.

NNSA Headquarters

NNSA is responsible for collecting the ES&H Five-Year Site Plans from each NNSA Field Element. Using a tailored approach, Headquarters and the Field will agree to a set of minimum change control thresholds prior to the start of the current year.

NNSA Headquarters should determine its own ES&H resource requirements necessary to conduct its ES&H oversight functions under DOE P 450.5. These requirements may include both federal employees and support services costs used to provide ES&H support. The number of federal FTEs for ES&H should be determined.

After the draft ES&H Five-Year Site Plans have been received at NNSA Headquarters, each NNSA program manager with responsibility for direct funding of ES&H activities will be provided the information, i.e., those ES&H compliance activities or commitments to non-

DOE/NNSA regulators, appropriate to their program management responsibilities. These managers will review the ES&H activities from each site and the relative priorities established by the Field. They should ensure that program related risks are being prudently and appropriately managed. In addition, ES&H SMEs in AAFO will review the ES&H funding totals and ES&H compliance activities and commitments, particularly indirect funded Institutional ES&H requirements. If necessary, the program manager/AAFO can adjust the relative priorities of activities to reflect the NNSA current perspective and strategic initiatives.

As part of the NNSA Headquarters programming phase, AAFO, the responsible program, and NNSA financial managers, will confirm that the "Target" (i.e., funded) resources provided by the Field are indeed addressed within the current budget targets provided by the CFO. They will review those compliance activities and commitments identified as "unfunded", their associated risks, any interim compensatory measures in place that ensure all important ES&H issues have been adequately addressed, and engage the Field where appropriate. Finally, NNSA will present and defend the ES&H program to the Secretary and other budget process stakeholders.

The NNSA budget and program managers may revise the ES&H priorities for the Budget Year to reflect decisions made during the programming phase decision making process. These revisions, if any, will be made in consultation with the affected NNSA Field Element Manager and, when appropriate, communicated to the contractor for use in updating the final ES&H Five-Year Site Plan.

After completing the programming phase, the Field will submit the final ES&H Five-Year Site Plans. NNSA will formulate its budget and provide the CFO a consolidated and/or updated submission of ES&H resource requirements from the ES&H Five-Year Site Plans and federal ES&H resource requirements that reflect current ES&H budget information.

In addition, AAFO and Program Managers will participate in the annual NNSA Contractor Performance Evaluation Process as follows: provide performance objectives for transmittal to the Field in the April-May time period, review and comment on the Field Offices' performance evaluation plans/laboratory appraisal plans, monitor performance against the plans during the execution year, provide input to the Field Offices on contractor performance against the plans, and review and comment on the Field Offices' annual contractor performance evaluation reports.

Appendix A

Suggested Format and Contents for ES&H Five-Year Site Plan

(Title Page)

Environment, Safety, and Health

Five-Year Site Plan

for

Budget Year FY 200X

(Identify Site)

(Date of Plan)

Section 1:

Resource Summary (\$K) Execution Budgeting Programming

esource Summary (5K)) Execution		Buageting	Progra	ramming		
DIRECT FUNDING	Prior Yr	Current Yr	Budget Yr	BY+1	BY+2	BY+3	BY+4
Safety and Health (General)							
Safety Authorization Basis							
Emergency Preparedness							
Fire Protection							
Industrial Hygiene							
Industrial Safety							
Safety and Health Management and Oversight							
Occupational							
Medical Services							
Nuclear Criticality Safety							
Nuclear Safety							
Radiation Protection							
Transportation Safety							
Environmental (General)							
Protection of Air Quality							
Control of Toxic Substances							
Protection of Water Quality							
Environmental Restoration							
Environmental							
Management, Oversight							
and Reporting							
Pollution Prevention and							
Waste Minimization							
Waste Management							
Total							

Resource Summary (\$K) Execution Budgeting Programming

INDIRECT FUNDING	Prior Yr	Current Yr	Budget Yr	BY+1	BY+2	BY+3	BY+4
Safety and Health (General)							
Safety Authorization Basis							
Emergency Preparedness							
Fire Protection							
Industrial Hygiene							
Industrial Safety							
Safety and Health							
Management and Oversight							
Occupational							
Medical Services							
Nuclear Criticality Safety							
Nuclear Safety							
Radiation Protection							
Transportation Safety							
Environmental (General)							
Protection of Air Quality							
Control of Toxic							
Substances							
Protection of Water							
Quality							

Environmental				
Restoration				
Environmental				
Management, Oversight				
and Reporting				
Pollution Prevention and				
Waste Minimization				
Waste Management				
Total				

Resource Summary (FTEs)

	Prior Yr	Current Yr	Budget Yr	BY+1	BY+2	BY+3	BY+4
Environment, Safety &							
Health							

ES&H Compliance Liability Estimate Table

	CY	SCY to CY+6
Funded Operating Expense + Capital Equipment		
Operating Expense	0	0
Capital Equipment	0	0
Total	0	0
Funded General Plant + Line Item Projects		
General Plant Projects	0	0
Line Item (Construction)	0	0
Total	0	0
All Unfunded Compliance		
Operating Expense	0	0
Capital Equipment	0	0
General Plant Projects	0	0
Line Item (Construction)	0	0
Total	0	0
Grand Total	0	0
Reconciliation	l.	
Beginning Balance as of FY 2002 (from the FY 2003 pla	an)	0
Less FY 2002 costs incurred (from the FY 2003 plan)		0
Changes due to items no longer compliance		0
Changes due to a change in scope		0
Other items (new compliance activities)		0
ES&H liability – Ending balance		0

Section 2:

ES&H Compliance Activities (by Fiscal Year in Priority Order, Funded and Unfunded)

- Description
- Source of Require ment
- Potential Impact of Non-Compliance
- Cost and Schedule to Correct
- DOE/NNSA Funding Source (e.g. B&R Category or PSO)
 (These items should also be reflected in the ES&H Compliance Liability Table above)

Section 3:

Open Commitments Made to Regulators (by Fiscal Year in Priority Order, Funded and Unfunded)

- Description
- Regulatory Agency
- Committed Completion Date
- Status
- Potential Impact if Not Met

Section 4:

Unfunded Core Program Maintenance/Investment/Improvement (in Relative Priority Order)

- Description
- Potential Impact if Not Funded
- Cost and Time to Resolve

Section 5:

Site Section

- (See the Content Guidance Below for Examples)
- Contractual ES&H Performance Metrics

Site Declaration:

ES&H Five-Year Site Plans shall include a signature of an appropriate senior manager attesting to the accuracy of the cost (i.e., budget quality) and scope of the ES&H data. Such a statement might be:

"Management has reviewed the ES&H activities provided in this ES&H Five-Year Site. The compliance activities represent our best estimate of the scope and cost of activities needed to maintain and bring the facility into compliance with applicable laws, regulations, executive orders, and DOE order requirements. No significant unfunded ES&H vulnerabilities are known except those identified in this Plan."

Signature Line for Contractor Mgt. Title	Date	
Concurrence Line for Area Office Mgt.	Date	

General Guidance for Content of ES&H Five-Year Site Plan Sections:

Section 1:

Resource Summary Tables (\$K)

- Include discrete ES&H program infrastructure activities; both compliance and core.
- Do not include those ES&H activities largely integrated into mission work and budgeted for as a part of that program/project that cannot easily be categorized as ES&H.
- Include ES&H activities performed to support mission work if budgeted for as part of the site's traditional ES&H program.
- Include activities within the list of ES&H functional areas contained in this guidance document.
- Report budget amount as thousands of dollars (\$K).

Complete tables for both direct funded and indirect funded ES&H by functional area. If the identified expense can not be uniquely identified by functional area, list as Safety and Health (general) and/or Environmental (general). [Note: The Direct Funded ES&H Resource Table should include the combined funding from all sources, i.e., NNSA, the Office of Environmental Management (EM), Other PSOs, Work for Others.]

Resource Summary Table (FTEs)

• Report total ES&H FTE's estimated by fiscal year reflected by the activities in the above Resource Summary Table (\$K).

ES&H Compliance Liability Estimate Table

• See Appendix B for further guidance.

Section 2:

ES&H Compliance Activities

The intent of this section is to identify to NNSA Area/Field/Headquarters and site contractor management known conditions of non-compliance that exist with current or anticipated applicable laws, regulations, orders, notices, executive orders, or other contractual obligations. Further, the intent is to identify those conditions that have potential for significant impact if not corrected in a timely manner and will result in need for additional resources or a diversion of resources from other activities. (For example: a new DOE/NNSA directive has been or is soon to be issued will require additional resources to implement and those resources are unavailable or will be diverted from other core/compliance activities.)

This section should include both Funded ES&H Compliance Activities (those activities that are currently being addressed or will be addressed within future budget targets) and Unfunded ES&H Compliance Activities (known non-compliances that cannot be accomplished within current or future budget targets). Activities should be listed by the fiscal year in which they are being addressed (or when they will be required).

The information submitted in this section could be a list or table. For each entry provide the following:

- Description Short narrative description of the compliance issue.
- Source of Requirement Identify regulatory agency and cite regulatory reference.
- Potential Impact of Non-Compliance describe realistic potential impacts of continued noncompliance. Consider impacts to worker safety, environmental protection, mission work, public perception, and potential fines.
- Cost and Time to Correct Describe the cost and time necessary to correct deficiency(ies) and come
 into compliant state. Most compliance activities are considered project-like with specific start and
 end states and associated costs.
- Source of Funding Identify the B&R category and/or DOE/NNSA PSO responsible for funding, i.e. the PSO which should be made aware of the unfunded condition.
- Cost estimates for funded and unfunded ES&H compliance issues should also be entered in the ES&H Compliance Liability Estimate Table in Section 1, (reference Appendix C for additional guidance).

If multiple entries are submitted in this section, they should be prioritized by risk and/or impact from highest to lowest.

Section 3:

Open Commitments Made to Regulators

The intent of this section is to identify to NNSA Area/Field/Headquarters and site contractor management commitments made to non-NNSA regulators that need to be brought to their attention and tracked to completion. (For example: commitments made to a state or local environmental regulator for additional site environmental monitoring.)

This section should include both Funded ES&H Commitments (those activities that are currently being addressed, or will be addressed within future budget targets) and Unfunded ES&H Commitments (known regulatory requirements that cannot be accomplished within current or future budget targets). Activities should be listed in by the fiscal year in which they are being addressed (or when they will be required).

The information submitted in this section could be a list or table. For each entry provide the following:

- Description Short narrative description of the compliance issue.
- Regulatory Agency Identify the regulatory agency to which the commitment has been made.
- Committed Completion Date Indicate completion date negotiated with the regulator and any significant intermediate milestones.
- Status Short description of current status. In particular, describe any issues or barriers that may prevent meeting the commitment.
- Potential Impact if Not Met Describe realistic potential impacts of not meeting the commitment. Consider impacts to worker safety, environmental protection, mission work, public perception, and potential fines.

If multiple entries are submitted in this section they should be prioritized by risk and/or impact from highest to lowest.

There is no need to duplicate entries reported in Section 2.

Section 4

Unfunded Core Program Maintenance/Investment/Improvement

The intent of this section is to identify to NNSA Area/Field/Headquarters and site contractor management activities/investments needed to maintain an adequate core ES&H program that are currently unfunded or for which resources are unavailable. (For example: replacement of aging industrial hygiene instrumentation, addition of new technology equipment, upgrades for environmental monitoring stations, etc.)

The information submitted in this section could be a list or table. For each entry provide the following:

- Description A short narrative description of the issue including the anticipated improvement.
- Potential Impact if Not Funded Describe realistic potential impacts of not resolving. Consider impacts to worker safety, environmental protection, mission work, public perception, and potential fines. Consider short and long term impacts.
- Cost and Plan to Resolve Describe the dollar amount and options being considered to resolve. If this is an investment issue describe estimated payback period on investment.

If multiple entries are submitted in this section they should be prioritized by risk and/or impact from highest to lowest.

Section 5:

Site Section

The annual ES&H performance metrics agreed to by the contractor and NNSA Field Element Manager/Contracting Officer per the ISMSD should be listed in this section. In addition, this section is available for the contractor site to identify to the NNSA Field Element/Headquarter and site contractor management other items of significance.

Examples:

- Describe prior year accomplishments and successes.
- Identify ES&H awards or site certifications received since prior year ES&H Five-Year Site Plan.
- Describe resolution of unfunded items and/or regulatory commitments (Sections 2, 3, 4) from prior year ES&H Five-Year Site Plans.

- Describe site's prioritization and/or change control processes.
- Provide general five-year outlook, planning assumptions, issues looming on the horizon but not yet significant enough to include in Sections 2, 3, 4.
- Provide general comments from site.

Appendix B

Related Terminology and Definitions

Compliance activities – Additional corrective actions, activities, or programs over and above the current core ES&H programs, that are required to improve the facility's state of compliance and move the facility toward full compliance or conformance with all applicable ES&H laws, regulations, agreements, executive orders, and DOE orders. After compliance is achieved, any continuing activities and resources required to maintain compliance should be considered as core programs. Generally, compliance activities will be of shorter duration than core activities and have a discrete beginning and end point. Compliance activities would include activities such as improvements to RTBF facilities to correct safety deficiencies, work to meet DNFSB recommendation commitments, etc.

Core activities – Currently performed ES&H activities that are considered necessary by site management to maintain current levels of ES&H compliance or to prevent increases in the current levels of ES&H risks. Core activities have the characteristic that if they were not performed, either (1) the level of compliance of the facility would be lower than the current level, or (2) the level of risk posed by facility operation would be greater than the current level. Generally, core activities will be continual site-wide activities and programs needed to do work safely, such as a radiological protection program, that are included in a site's ISM systems. Core activities would be considered the normal ES&H support necessary to conduct Campaigns and DSW and maintain surveillance and maintenance of RTBF funded facilities, as well as the normal institutional ES&H work.

<u>Budget Year (BY)</u> - This guidance uses the standard CFO nomenclature for budget years as used in the UNICALL and as defined in the Budget Formulation Handbook As such, Budget Year is the fiscal year for which the budget is being considered, i.e. FY 2004.

<u>Commitment</u> - An agreement between NNSA Field Element Manager/Contracting Officer and contractor management to accomplish certain ES&H work activities or meet certain conditions, as described in a site's annual update to its ISMSD.

<u>Current Year (CY) or (BY-1)</u> - This guidance uses the standard CFO nomenclature for budget years as used in the UNICALL and as defined in the Budget Formulation Handbook. As such, Current Year is the fiscal year immediately preceding the budget year. It is the fiscal year of the budget currently being considered in Congress, i.e. FY 2003.

<u>Direct Costs/Funding</u> - Any costs that can be specifically identified with a particular cost objective that are directly related to and are being incurred principally for the benefit of the program receiving the charges. Costs that can be directly charged to a specific NNSA appropriation or other PSO appropriation: specific Campaigns, DSW, RTBF, etc.

<u>Environment, Safety and Health (ES&H) Activities</u> – Work conducted whose primary intent is to protect the health and safety of the public, workers, and the environment.

<u>Indirect Costs Funding</u> – A cost incurred by an organization for common objectives that cannot be identified specifically with a particular project or activity, (also referred to as allocable funding).

Integrated Safety Management (ISM) – A formal, organized process for planning (including programming and budgeting), performing (executing), assessing and improving the safe conduct of work established in response to DNFSB Recommendation 95-2 and primarily implemented via DOE P 450.4, Safety Management System Policy, and DEAR 48 CFR, 970.5223-1. Within ISM, the term safety means "environment, safety and health". ISM is structured around five core functions: define work, identify hazards, develop controls, perform work, and feedback and continuous improvement; and seven guiding principles (line manager responsibility for ES&H, clear ES&H roles and responsibilities, competence commensurate with responsibilities, balanced priorities, identification of ES&H standards and requirements, hazard controls tailored to work being performed, and operations authorization).

Out-year (BY+1 through BY+2) – This guidance uses the standard CFO nomenclature for budget years as used in the UNICALL and as defined in the Budget Formulation Handbook. As such, an out-year is any fiscal year or years beyond the budget year for which projections are made, i.e. FY 2005 through FY 2006.

<u>Planning, Programming, Budgeting, and Evaluation (PPBE) Process</u> – The formal process by which NNSA conducts long-range planning, develops programming requirements for resources in the short-term planning period (five-years), develops its budget for direct mission and mission support activities, accomplishes the mission and mission support activities once funding has been appropriated by Congress, and evaluates the effectiveness of the activities in meeting the mission goals.

<u>Program Execution Guidance</u> – Guidance that is developed jointly by DOE/NNSA Headquarters and NNSA Area/Operations/Field Offices and issued to contractors that provides programmatic assumptions, expected outcomes, milestones, performance measures, financial controls and reporting requirements, to be used in developing, implementing, and monitoring fiscal year operations at a site.

<u>Prior Year (PY) or (BY-2)</u> – This guidance uses the standard CFO nomenclature for budget years as used in the UNICALL and as defined in the Budget Formulation Handbook. As such, Prior Year is the fiscal year immediately preceding the current year and two fiscal years preceding the budget year. It is the fiscal year in which the budget is being executed, i.e. FY 2002.

<u>Significant Risks</u> – Those conditions which have been identified in activities considered necessary to prevent accidents and manage "immediate" risks to the public, site workers, or the environment; or high interest activities needed to meet commitments to regulatory bodies such as DNFSB recommendations accepted by DOE, commitments with regulators, compliance agreements, etc.

<u>Significant Vulnerabilities</u> – ES&H vulnerabilities identified during Departmental or local assessments (such as the Plutonium Working Group Report, Highly Enriched Uranium Working Group Report, Oversight Assessments, etc.) or by external groups (such as the DNFSB) which have been evaluated as having a high likelihood and medium to high consequences of posing a risk to the public, site workers, or the environment, and those vulnerabilities which contribute to the conditions that pose significant risks as described in the definition of "Significant Risks" above.

<u>Unfunded Activity</u> – ES&H work that is desirable to conduct, but for which target funding is not anticipated to be provided, based on planned program direction and budget decision-making. This also includes the unfunded portion of partially funded ES&H activities.

<u>Unified Budget Call (UNICALL)</u> – Guidance that is issued by the DOE CFO in January to DOE and NNSA Area/Operations/Field Offices that provide the contents, timing, format, and instructions for formulating budgets.

Appendix C

ES&H Compliance Liability Estimate

ES&H Five-Year Site Plans should provide information necessary to determine the ES&H Compliance Liability for the site. ES&H compliance activities are considered ES&H liabilities under GMRA. These liabilities must be recorded by the Field in their annual financial statement. However, core ES&H activities are not considered part of the ES&H liability. The compliance activities submitted for the FY 2004 data call should be traceable back to the compliance activities identified during the FY 2003 budget cycle. ES&H compliance activities should be specifically identified in ES&H Five-Year Site Plans so the ES&H Compliance Liability can be defined for the site. The definitions for compliance activities and core activities are provided in Appendix B.

Compliance activities identified in ES&H Five-Year Site Plans should specify the underlying drivers (i.e., law, regulation, agreement, DOE order, standard, or guidance) that are motivating the activity.

Specific guidance on what comprises the ES&H Compliance Liability is as follows:

On an annual basis, the DOE CFO directs sites to verify their total cumulative ES&H liability funding and the individual activities that make up the total. Therefore, site and NNSA Area/Operations/Field Offices must be able to reconcile any differences between compliance activities for two subsequent annual budget submissions. Any differences should be known and attributable to a specific reason, i.e., either the activity was completed in the fiscal year, the activity was rescoped, or the activity is no longer considered a compliance issue.

The FY 2002 ES&H Compliance Liability estimate should include the total estimated costs of all compliance activities identified in FY 2004 ES&H Five-Year Site Plans. Funding identified in both funded and unfunded ES&H compliance activities should be summed for FY 2003 and beyond. Field Offices should ensure their data is consistent with NNSA's FY 2004 budget process.

Per the guidance developed by the DOE CFO, the ES&H Compliance Liability Estimate is the total estimated cost of all compliance activities funded by all Cognizant Secretarial Officers, except Environmental Management (EM). The EM portion of the ES&H compliance liability is reported separately under the *Accelerating Cleanup: Paths to Closure* effort. The estimate should also exclude compliance activities funded by other federal government agencies, e.g., the General Services Administration. Compliance funding should be allocated among the following three categories:

- (1) Funded operating expenses (OE) and capital equipment (CE) activities, summed from FY 2003 to the completion of the activity;
- (2) Funded general plant projects (GPP) and line-item construction projects (LIP), summed for FY 2003 to the completion of the project; and
- (3) Total estimated funding (OE, CE, GPP, and LIP) for all currently unfunded compliance activities that need to be funded in the future, summed for FY 2003 to the completion of the activity/project.

Documentation should be maintained to describe all adjustments to the ES&H compliance liability that was recorded for FY 2001. A reconciliation schedule must be provided to the Office of Financial Control and Reporting as part of the year-end financial statement footnote disclosures. The reconciliation should reflect the differences between FY 2001 and FY 2002 in terms of compliance activities (1) completed; (2) re-scoped; or (3) no longer deemed necessary. The year-end footnote disclosure guidance will provide a general format for this reconciliation. In general, the reconciliation of the ES&H Compliance Liability information should utilize the following structure:

- Beginning balance as of FY 2002 (from FY 2003 plan)
- Less FY 2002 costs incurred (from FY 2003 plan)
- Changes due to items no longer compliance
- Changes due to a change in scope
- Other items (new compliance activities)
- ES&H liability Ending balance

Field Offices should retain a signed copy of ES&H Five-Year Site Plans identifying ES&H compliance activities at their sites for audit purposes. Signatories comprise facility/site managers and cognizant Field Element Manager. In addition, the Operations Office/Area Office Manager or designee must sign the forwarding memorandum for the ES&H compliance liability estimate and is responsible for the accuracy of the estimated cost and scope of the ES&H compliance data.

Appendix D

Functional Areas

As noted in section 4.1.1 of this guidance, ES&H functional areas have been established to assist planners in understanding and communicating the major ES&H issues, activities, and costs associated with a facility or sites overall ES&H program. Functional area definitions are provided in the DOE-wide ES&H Guidance included with the Field Budget Call. NNSA has established three unique functional areas (Safety Authorization Basis, Nuclear Criticality Safety, and Nuclear Safety) that are defined in this attachment. These definitions are intended as guidance for the types of programmatic activities that are included in the particular functional area.

Sites with approved Contract List B's or approved Work Smart Standard sets should utilize their List B or Work Smart Standard sets to determine requirements applicable to their site. These definitions do not add requirements or supercede the site's approved requirements in the Contract List B or Work Smart Standard sets. Specific sub-areas and associated compliance drivers are delineated in each functional area to facilitate the development of comprehensive programs.

Additional NNSA Safety and Health Functional Areas

Functional

Area Code Functional Area Name and Description

AB SAFETY AUTHORIZATION BASIS

The Safety Authorization Basis functional area includes all activities related to the development and review of authorization basis documentation required at DOE sites. The authorization basis establishes the safety envelope for a facility operation or activity and defines what will have to be done to control safety of the operation (or activity). The authorization basis includes the hazard analysis, the definition of administrative and engineering controls to prevent and mitigate hazards, and the associated technical and operational limits. The type of safety documents that will constitute the authorization basis will vary with the hazard and complexity of the operation or activity. The costs associated with the activities for preparation of these hazards analyses shall be reported herein; costs associated with operational testing, training of operating personnel, and similar costs involved in the preparation of new facilities for weapon production operations shall be reported under Facilities Management and Site Planning. Primary regulations and DOE orders relevant to this area include: 10 CFR 820; 10 CFR 830; DOE O 420.1; DOE G 420.1-1; DOE G 420.1-2; DOE O 420.2A; DOE O 430.1A; DOE O 5480.21; DOE O 5480.22; DOE O 5480.23; DOE O 5480.30; DOE O 6430.1A; DOE P 410.1A; DOE P 430.1.

AB1 Nuclear Explosive Facilities Operation Authorization Basis

The costs for authorization basis documentation as required by DOE O 452.1B, *Nuclear Explosive and Weapons Surety Program*; DOE O 452.2B, *Safety of Nuclear Explosives Operations*; DOE G 452.2A-1A, *Implementation Guide for DOE Order 452.2A*, *Safety of Nuclear Explosives Operations*; DOE O 452.4 *Security and*

Control of Nuclear Explosives and Nuclear Weapons, and DOE M 452.4-1, Protection of Use Control Vulnerabilities and Designs and associated requirements.

AB2 Nuclear Facilities Operation Authorization Basis

The costs for authorization basis documentation as required by DOE O 5480.23, *Nuclear Safety Analysis Reports*; DOE O 5480.22, *Technical safety Requirements*; and DOE O 5480.21, *Unreviewed Safety Question*, and associated requirements.

AB3 Non-Nuclear Facilities Operation Authorization Basis

The costs for authorization basis documentation as required in DOE orders and associated requirements.

AB4 Readiness Review Program

Activities for the contractor to implement an internal Readiness Review Program, and to undergo a DOE/NNSA Operational Readiness Review (ORR) or Readiness Assessment (RA), where determined by DOE/NNSA in accordance with DOE O 425.1B, *Startup And Restart Of Nuclear Facilities*, and supporting requirements. These include contractor activities to prepare the following documents: startup/restart notification reports, plans-of-action, implementation plans, ORR/RA final reports, and pre-start/post-start action plans.

NC NUCLEAR CRITICALITY SAFETY

The Nuclear Criticality Safety functional area includes those activities that serve to prevent or terminate an inadvertent nuclear chain reaction in non-reactor environments. Included are: practices and procedures relevant to nuclear criticality safety program administration and oversight, nuclear criticality safety design and performance of safety evaluations and analyses, criticality alarms and detection systems and emergency response, and programmatic engineering and/or administrative controls of processes, storage, and procedures for fissionable materials that exist in such form and quantity where the potential for a nuclear criticality accident exists and thus, presents a potential nuclear hazard to the employees and the general public. Also included are activities involving nuclear criticality safety physics experiments on such materials, development and maintenance of computational codes and methods for determining nuclear criticality hazards, and nuclear criticality safety personnel selection, training, and qualification for the following types of operations: production, processing, or storage of radioactive liquid or solid waste (prior to their transfer to facility waste operations units), nuclear material separations operations; irradiated materials inspection, fuel fabrication, decontamination or recovery operations; and fuel enrichment operations.

NC.1 Nuclear Criticality Safety Physics and Computation

Primary regulations and DOE orders relevant to this area include: 10 CFR 830; DOE O 420.1; DOE G 421.1-1.

NC.2 Design, Engineering and Administrative Controls

Primary regulations and DOE orders relevant to this area include: 10 CFR 830; DOE O 420.1; DOE G 420.1-1; DOE G 421.1-1; DOE O 425.1B; DOE 5480.21; DOE 5480.22.

NC.3 Personnel Training and Qualifications

Primary regulations, DOE orders and standards relevant to this area include: 10 CFR 830; DOE O 420.1; DOE G 421.1-1; DOE O 5480.20A; DOE-STD-1135-99.

NC.4 Program Administration, Safety Evaluation and Analysis

Primary regulations, DOE orders and standards relevant to this area include: 10 CFR 830; DOE O 420.1; DOE G 421.1-1; DOE O 5480.23; DOE-STD-3007-93; DOE-STD-1134-99.

NC.5 Criticality Alarms, Detection Systems and Emergency Response

Primary regulations and DOE orders relevant to this area include: 10 CFR 830; DOE O 420.1; DOE G 421.1-1.

NS NUCLEAR SAFETY

The Nuclear Safety functional area includes those activities that serve to maintain or improve the level of safety involved with radioactive and or fissionable materials that exist in such form and quantity that a nuclear hazard potentially exists to the employees or the general public. Included are activities involving explosive safety or nuclear operations safety associated with the following types of operations: production, processing, or storage of radioactive liquid or solid waste (prior to their transfer to facility waste operations units), fissionable materials or tritium; nuclear material separations operations; irradiated materials inspection, fuel fabrication, decontamination or recovery operations; and fuel enrichment operations. In addition, Safety Authorization Basis and Nuclear Criticality Safety are addressed in their own separate functional areas.

It is not intended that the programmatic aspects of nuclear operations be captured and reported in this functional area; only those activities designed to enhance or maintain the safety and health performance of the line programs should be categorized as nuclear safety. The physical systems, personnel and programs to provide nuclear material accountability, and S&S are not included in ES&H Five-Year Site Plans.

NS.1 Explosive Safety

Primary regulations and DOE orders relevant to this area include: 10 CFR 830; DOE O 452.2B.

NS.2 Operations and Processing Safety

Primary regulations and DOE orders relevant to this area include: 10 CFR 830; DOE O 420.1; DOE G 420.1-1; DOE G 420.1-2; DOE O 5480.20A; DOE O 425.1B.

NS.3 Material Handling and Control

Primary DOE orders relevant to this area include: DOE O 460.2; DOE O 461.1; DOE M 461.1-1; DOE O 5660.1B.

NS.4 Facilities and Systems

Primary regulations and DOE orders relevant to this area include: 10 CFR 820; 10 CFR 830; DOE O 420.1; DOE G 420.1-1; DOE G 420.1-2; DOE O 420.2A; DOE O 430.1A; DOE O 5480.21; DOE O 5480.22; DOE O 5480.23; DOE O 5480.30; DOE O 6430.1A; DOE P 410.1A; DOE P 430.1.